REMARKS

Claims 1-20 remain pending. By the foregoing amendment, claims 1, 3, and 5 have been amended to better define the invention to point out that the hydrogenous thermalizing media is a light guide-thermalizing media. Support for the amendments is found throughout the specification, *inter alia*, at ¶¶ 16, 17, and 22. No new matter is added.

The information disclosure statement stands objected to because a "date of publication" was not included for several of the cited documents. Three of the objected-to citations included a date the documents were printed from a website. The requirements for citations of non-patent publications are set forth in 37 C.F.R. § 1.98(b)(5), which reads:

> Each publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication. (emphasis added)

Rule 98(b)(5) requires a date but does not specifically require a "date of publication," as required by the Office Action. The qualifying language "of publication" appears only in the context of "pages" and "place," and the final two items are separated by a comma indicating the modifier "of publication" applies only to the last item "place" and not to the penultimate item "date." As explained in M.P.E.P. § 609:

> Once the minimum requirements of 37 CFR 1.97 and 37 CFR 1.98 are met, the examiner has an obligation to consider the information. There is no requirement that the information must be prior art references in order to be considered by the examiner. Consideration by the examiner of the information submitted in an IDS means nothing more than considering the documents in the same manner as other documents in Office search files are considered by the examiner while conducting a search of the prior art in a proper field of search. (emphasis added)

Applicants submit that the three Internet citations, which included a date of printing, meet at least the minimum requirements of 37 C.F.R. §§ 1.97 and 98. Therefore, the Examiner is under an obligation to consider this information pursuant to M.P.E.P. § 609. The Examiner is requested to return an initialed copy of the form 1449 together with the next Office Action indicating that these documents have been considered.

Claim 1 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Craig et al. U.S. Patent 6,580,079 ("Craig"). This rejection is respectfully traversed insofar as it may be applied to claim 1 as amended.

The Office Action cites the embodiment of FIGS. 4A-4C of Craig, which show layers of radiation detectors 400 within a moderator 410 formed of graphite or a hydrogenous material such as water or polyethylene. The radiation detectors 400 may be formed as optical fibers arranged in layers or alternatively as ribbon or sheet. The scintillator material may be organic, inorganic, lithium silicate glass, or plastic (col. 5, lines 65 to col. 6, line 4).

Claim 1 has been amended to better define the invention to point out that the hydrogenous thermalizing media is a light guide-thermalizing media. Craig does not describe a neutron detector comprising a thermal neutron sensitive scintillator film interleaved with a hydrogenous light guide-thermalizing media, as set forth in amended claim 1. As discussed in ¶ 17 of the specification (and elsewhere), this combination provides a highly efficient use of space because the hydrogenous media can reduce the velocity of incoming fission neutrons to thermal energies while also being able to conduct the light from the scintillating layers to a photo-sensor. Gamma rays which might ionize in the primary volume of hydrogenous media can convert to a recoil electron and lose kinetic energy in the hydrogenous media. Craig does not describe or

suggest a neutron detector having the combination of features set forth in claim 1. Reconsideration and withdrawal of the rejection over Craig are respectfully requested.

Claims 2-6, 8-14, and 16-20 stand rejected under 35 U.S.C. § 103(c) as being unpatentable over Grodzins U.S. 2005/0023479 ("Grodzins"). Claims 7 and 15 stand rejected under 35 U.S.C. § 103(c) as being unpatentable over Grodzins in view of Koechner U.S. Patent 4,942,302 ("Koechner"). Each of these rejections is respectfully traversed.

The Office Action cites Grodzins as disclosing in Figs. 3, 4, and 7 and ¶ 50 a thermal neutron sensitive scintillator film 82 interleaved with a hydrogenous thermalizing media. The Grodzins application was filed June 4, 2004, after the April 13, 2004 filing date of the subject application. Grodzins claims priority to provisional application 60/476,101, filed June 5, 2003. However, the subject matter on which the Office Action relies was not disclosed in the '101 provisional application. As such, the § 102(e) prior art date for this subject matter is June 4, 2004 rather than June 5, 2003. Therefore, at least the portion of Grodzins on which the Office Action relies is not prior art against the subject application. See M.P.E.P. § 706.02. The rejection of claims 2-6, 8-14, and 16-20 over Grodzins is improper for at least this reason and should be withdrawn.

Koechner is cited as a secondary reference describing a wavelength shifter in conjunction with a scintillator. However, Koechner fails to disclose or suggest a neutron detector having the particular features recited in independent claims 1 and 10. Dependent claims 7 and 15 are allowable for at least the same reasons applicable to claims 1 and 10, from which they depend respectively.

CONCLUSION

In view of the foregoing, favorable reconsideration and allowance of the subject application are respectfully requested. The Examiner is invited to telephone the undersigned at the number listed below if doing so would be helpful to resolve any outstanding issues.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Date: June 22, 2006

By: /Paul M. Rivard/
Paul M. Rivard
Registration No. 43,446

Customer No. 22907

1001 G Street N.W.
Washington, DC 20001
(202) 824-3000 (telephone)
(202) 824-3001 (facsimile)